BACON ACADEMY OIL SPILL SUMMARY 2/15/2022

- 2/15/2022 Fuel Oil Spill. Generator Day Tank. Mechanical Failure.
- Colchester Fire Department & DEEP personnel were called to assist with the oil containment.
- Environmental Service Incorporation (ESI) was contacted by Tom Welch DEEP to start the interior and exterior containment and clean up.
- An estimated 1,500-1,700 gallons of fuel oil was released within the school's boiler room when the solenoid valve and high level float switch associated with the day-tank for the emergency generator failed. Product entered the floor drains and made its way to a small stream located on the northern side of the school. ESI, as the spill contractor, recovered approximately 1,000 gallons from the building's drainage network and the stream.
- DEEP advised school's administrators to enter a Voluntary Remediation Program and to hire an Environmental Consultant to evaluate the extent of petroleum impacts to the sub-slab soils and Site groundwater and perform limited product recovery to evaluate the level-of-effort needed to recover the remaining product and limit the advancement of the groundwater contamination plume.
- TRC Environmental Corporation was hired to provide these services.
- TRC's cost estimate to complete these tasks is $77,169.
- As of today we have received an invoice from ESI for $162,284 for services starting 2/15/22 to 5/10/2022.
- We have a PO for $28,995 to replace the Day Tank. There have been delays on the delivery of the equipment. It is scheduled to be installed in the last week of June.

The following is a summary of activities completed and costs associated for TRC services to date.

<u>Installation of monitoring well network (four wells)</u>

- Product identified in the monitoring well located outside of the mechanical room (front side of school)
    - Initial fuel oil thickness measured 1-inch, removed with oil absorbent sock
    - Subsequent monitoring has shown that product detection is intermittent, ½-inch on 6/3/22

Installation of sub-slab observation/product recovery wells inside mechanical room (8 wells)

- Measurable fuel oil observed in one interior location at the time of installation, recovered approximately 175-gallons of fuel oil.
- Measurable fuel oil identified in two other observation wells in during recent monitoring events
    - May 21st, vacuum truck dispatch on to remove product from exterior observation/recovery well, approx.. 4 gallons of oil recovered.
    - June 3rd, measurable quantities of fuel oil continues to be observed in three observation/recovery wells, recovering with absorbent socks.

Storm drainage

- Storm drain network between mechanical room and exterior catch basin jetted (removal of residual product) and video-scoped for potential release points.
    - No release points identified, drains looked competent and joint sealed (based on construction of exposed sections that were fitted with Fernco couplings.
- Storm drain outfall/wetland area
    - Diesel fuel recovered from the stream channel, heavily stained leaf litter/debris removed and disposed off-site.
    - No residual sheens observed in the stream channel, all oil absorbent boom removed from catch basins and stream.

Indoor Air Quality Assessment

- April 29th, Mystic Air conducted post-release air monitoring of the hallway corridor outside mechanical room.
    - Elevated concentrations of volatile organic compounds detected, the hallway remains off limits to pedestrian traffic.

Environmental Conditions Assessment Form (ECAF)

- TRC is in the process of completing the ECAF process and the entering the property into the CTDEEP's Voluntary Cleanup Program
    - Anticipated completion date – July 31, 2022

Estimated Product Recovery

- Initial spill Response – 1,100 gallons
- Sub-slab recovery – 180 gallons
- Est. recovered by boom – 350 gallons
    - **Total – 1,630 gallons recovered**

Approximately 70 - 370 gallons of fuel oil unaccounted based on estimated loss of 1,700 to 2,000 gallons.

Cost to date:

Monitoring and observation well Installation and TRC monitoring and inspection services June 3, 2022

Vendor	**Costs Through June 3, 2022**	**Scope of Service**
TRC Labor	$8,345.75	Inspection/monitoring/DEEP filings
ESI	$45,041.70*	Monitoring and Observation well, installation, line jetting, product recovery, waste disposal
Underground Surveying	$880.00	Utility clearance for boring locations
Mystic Air	$1,958.00**	Indoor air testing
US Environmental Rental	$229.30	Monitoring equipment rental
Luchs Engineering	$700***	Monitoring well elevation/location survey
Total	**$57,154.45**	

* - ESI invoice doesn't include vacuum truck and disposal fees for services provided on 5/21/22, or removal and disposal of the remaining boom installed following the initial release.
** - Mystic Air fees not yet invoiced
*** - Luchs fees not yet invoiced

Residual fuel oil remains beneath the slab of the mechanical room and just outside of it on the southern side of the building (front of building). Based on the observed fuel oil thickness measurements fluctuating between ¼ and 2 inches), TRC recommends continuing passive product recovery using oil absorbent socks installed in the wells, to be replaced weekly for an additional eight weeks. The observed fuel oil thickness levels

and estimated quantity of residual fuel doesn't warrant the installation of a permanent product recovery system.

Remaining Scope/Recommendations

- Groundwater Sampling/Reporting
- DEEP ECAF filing and Enrollment into the Voluntary Cleanup Program
- Continued weekly inspections w/passive product recovery
- Sealing of the mechanical room floor and Indoor Air Quality Assessment

Estimated cost for remaining scope with the additional inspections and product recovery not included with the original scope:

- **$25,000**

Note that this estimate doesn't include cost for any additional groundwater monitoring that may be required by the DEEP to monitor the natural attenuation of groundwater contamination plume resulting from the fuel oil release.